Introduction

Since the 1960s, the University of Toledo (UT) provided post-secondary training and related educational services to adults in Lucas County, including the City of Toledo. To better serve these needs, the University developed its Scott Park Campus in Toledo, which eventually grew to serve over 4,000 students per year. The UT Board of Trustees unanimously voted to close UT's Community and Technical College effective July 1, 1999. This action depleted the City of Toledo and Lucas County of a viable post-secondary institution.

Consistent with the City's 20/20 long-range economic and land-use plan, the City Council commissioned a study to determine the availability of and need for lifelong post-secondary training and education services in downtown Toledo, within the City of Toledo, and in Lucas County. Recognizing the potential implications for economic re-development, Council sought an analysis of the desirability of locating such a facility in downtown Toledo. This study will: a) examine issues related to location of such a facility, and b) to identify and examine options for providing such programs and services in the City. Three interrelated questions will be examined:

1. What post-secondary training and related educational services do the business community, government officials, and residents in the City of Toledo and Lucas County believe are needed to prepare the workforce to participate in the Information Age?
2. Should such services be contracted with an existing educational entity or should an entirely new entity be established, and what criteria should inform and frame these decisions?
3. Is there an advantage to locating these educational services close to prospective students, to government and business offices, and to the area's principal mass transportation hub?

These questions will be examined within a context that includes consideration of the: history and current status of post-secondary education within Ohio; changing economic and demographic dynamics of Toledo; and impacts of a downtown college to the residents, potential students, businesses, economic development efforts, and to the City and County governments.

PART I: THE DOWNTOWN CHALLENGE IN FEDERAL AND STATE CONTEXT

In considering the level and scope of post-secondary education and workforce training programs needed in Downtown Toledo and Lucas County, Ohio, as part of its 20/20 long-range

plan, business and civic leaders have a unique challenge and opportunity. The community and state community colleges in Cincinnati, Cleveland, Columbus, and Dayton are part of their thriving downtowns.[1] It must be acknowledged that the existence of a college within a downtown era has a significant effect on nearby business development and economic stability.

Beginning in 1937, the University of Toledo (UT) operated its "Junior College," and later, beginning in 1965, its Community and Technical College (hereafter, ComTech) as a public sub-baccalaureate institution. The closing of ComTech in July 1999 has limited the access to low tuition, sub-baccalaureate programs and services for citizens of downtown Toledo and Lucas County, despite UT and other colleges continuing to offer post-secondary sub-baccalaureate credit and non-credit courses in the downtown and near downtown areas of Toledo.

The most common institutional form of post-secondary, sub-baccalaureate education is the community college. Therefore, we will focus generally on that institutional form as an indicator of sub-baccalaureate dynamics and issues. Nationally, most community colleges were established between 1955 and 1975, growing from fewer than 600 to more than 1,200[2] (Phillippe & Patton, 1999, pp 10-11). By 1980, expanded participation had resulted in the establishment of the world's first mass system of post-secondary education.

Between 1965 and 1975, a new community college campus opened at the rate of one per week. While the pace of institutional establishment has dramatically slowed by the late 1970's,[3] enrollment at two-year colleges has grown from 2.4 million in 1970 to 4.2 million in 1980 to over 10.4 million in the fall of 1999 or over 44% of all U.S. undergraduates.[4] Over half (5.4 million) of these students enrolled in for-credit courses and the rest in non-credit courses.

A. State Policy and Under-investment in Ohio's Education System

[1] For example, Dayton has 21,000 students in their downtown Sinclair Community College. Cleveland's Cuyahoga Community College has about 4,000 students attending their downtown campus. Cleveland State University has about 15,700 students in downtown Cleveland.

[2] Kent A. Phillippe and M. Patton, M. (1999). National Profile of Community Colleges: Trends and Statistics (Third Edition). Washington, DC: Community College Press.

[3] Arthur M. Cohen and Florence B. Brawer (1996). The American Community College, p. 15.

[4] American Association of Community College web site, http://www.aacc.nche.edu/allaboutcc/snapshot.htm

As Table 1 shows, Ohio's system of public higher education evolved differently at *both* the baccalaureate and sub-baccalaureate levels than did those of other Mid-Western states such as Michigan or Illinois.[5] In 1960, Ohio's public university system consisted of Bowling Green,

Table 1

Diversity of Structure of Higher Education in Illinois, Michigan, and Ohio

	No. of	Fall '96 Enrollment		Distribution of	Enrollment Ratio,
Illinois	**Colleges**	**Number**	**%**	**Public Enrollment**	**2- to 4-Year, F96**
PUBLIC					
Two-Year	49	**337,716**	47.0	63.6	
Four-Year	12	192,532	26.8	36.4	
Sub-total:	*61*	*430,248*	***73.8***	*100.0*	**2:1**
PRIVATE					
Two-Year	13	4,270	0.6		
Four-Year	95	183,336	25.5		
Sub-total:	*108*	*187,606*	***26.1***		
Total:	***169***	***717,854***	***100.0***		
Michigan					
PUBLIC					
Two-Year	30	**203,394**	37.1	44.0	
Four-Year	15	258,996	47.2	56.0	
Sub-total	*45*	*462,390*	***84.3***	*100.0*	**1:1**
PRIVATE					
Two-Year	8	2,645	0.5		
Four-Year	56	83,304	15.2		
Sub-total:	*64*	*85,949*	***15.7***		
Total:	***109***	***548,339***	***100.0***		
Ohio					
PUBLIC					
Two-Year	37	**147,732**	27.3	36.1	
Four-Year	24	262,036	48.5	63.9	
Sub-total:	*61*	*409,738*	***75.8***	*100.0*	**1:2**
PRIVATE					
Two-Year	27	13,342	2.5		

[5] Ohio's system is however, similar to other nearby states such as Pennsylvania. During the last 20 years Pennsylvania has created a system of branch campuses as their principal sub-baccalaureate institutional form.

Four-Year	68	117,115	21.7
Sub-total:	*95*	*130,457*	***24.2***
Total:	***156***	***540,275***	***100.0***

Source: Digest of Education Statistics (1997), Tables 190, 196, 242. Data are for Fall 1996.

Central State, Kent State, Miami, Ohio, and Ohio State Universities. Municipally funded universities in Akron, Cincinnati, Youngstown, and Toledo joined the state system in 1967. In contrast, only Chicago State University, founded by the Chicago Public Schools to train teachers, was municipally controlled in Illinois. By 1965, the state role in providing and funding public higher education opportunities across the state of Illinois was well secured. The public higher education system included the University of Illinois with campuses at Urbana-Champaign and Chicago, Southern Illinois University with campuses in Carbondale and Edwardsville, and Eastern, Northern, Northeastern, Western, and Illinois State Universities. The Illinois Junior College Act of 1965 assigned the area served by each school board in the state to a specific junior college district and provided state funding for operating budgets. Thus, Ohio trailed Illinois (and much of the US) by decades in creating a public higher education system.

At the post-secondary level, a number of cities in Illinois and Michigan had established junior colleges before 1920. By 1960, 18 junior or community colleges existed in Michigan and 16 in Illinois. In sharp contrast, *none* existed in Ohio due to a 1928 Attorney General's opinion prohibiting "bottom up" establishment.[6] The practical effect of the 1928 Opinion *required* an act of the legislature to establish public two-year colleges, excluding branch campuses of public universities. Bills establishing public two-year colleges failed to pass in the Ohio General Assembly in 1929, 1931, 1949, 1951, and 1953. Both houses passed a 1959 bill, only to be vetoed by Governor Michael V. DiSalle, who cited the legislature's failure to appropriate operating funds. The Community College Act that finally passed in 1961 (subsumed by the 1963 act creating the Ohio Board of Regents) was deeply flawed, addressing only geographic and not programmatic access. Since knowledge of these two terms is critical to understanding the problem in Toledo, both of these terms are defined below:

Geographic access is the ability of the citizenry to physically access the educational programs and services that the community college offers. Governor James Rhodes attempted to

[6] Turner, E.C. 1928. Opinions of the Attorney General of Ohio, Volume II; 833-1630, Opinions Nos. 1934-2295.

solve this problem during the 1960s with his oft-stated objective of placing higher education institutions within 25 miles of every citizen in the State. In addition to establishing 23 independently governed community colleges, state community colleges, and state technical colleges, the State supported some 36 university-administered branch campuses.

Programmatic access involves the basic range of programs and services that students and communities find when they arrive at their two-year colleges. Are the programs and services comprehensive in scope and broad in depth to extend to the citizenry universal access to lifelong learning skills, technical offerings, and general education opportunities? Do students who enroll in one area of the state have access to the same *general* range of services as students elsewhere?

Failing to address equality of programmatic access was the basic flaw of Ohio's 1961 Community College Act, and it remains so today. Students born within the boundaries of counties that taxed themselves to provide community college education, such as Cuyahoga or Montgomery are much more likely to have access today to a wider range of income-generating, post-secondary programs. Similarly, businesses in self-taxing counties can access a broader range of credit and non-credit training programs that can foster skill development and maintain a competitive workforce. Other states, most notably North Carolina and Texas, did a better job of providing programmatic access through their enabling statutes than did Ohio. They and other states often described as leaders in the new economy share two characteristics: universal post-secondary access and not allowing universities to administer public two-year colleges.

Today, most of the states recognized as leaders in economic development activities have created *systems of lifelong learning.* While Ohio in the 1960s and 1970s established institutions to deliver geographic access, it never provided comprehensive programmatic access, as Table 2 shows. Depending solely upon where in the state one was born or where a business currently resides, many academic programs and/or workforce training programs may not be available. Further, the extent of local control and accountability can vary.

Table 2
Institutional Diversity of Public Two-Year Colleges in the State of Ohio

	Number	**Comprehensive Curriculum**	**Method selecting trustees**
Community Colleges	6	Yes	Local Appointment

State Community Colleges	9	Yes	State Appointment
State Technical Colleges	8	No	State Appointment
University Branches	36	No	State Appointment

Source: Ohio Board of Regents, 1997 Student Data Series, http://www.regents.state.oh.us/bds97/bds97a2.pdf

Different histories and system components have led to significantly different outcomes. Illinois possesses half a million more people than Ohio and the same percentage of its adult population between the ages of 18 and 64. Illinois has 337,716 students enrolled in its community colleges, as compared to 147,732 in Ohio. Michigan, a state with a much smaller total population, had nearly 70,000 more students enrolled in its community colleges. Ohio's community college under-enrollment is directly tied to state under-investment. Between 1952 and 1958, Ohio ranked 41st among the 48 states in its state investment in public higher education. By 1999, Ohio had improved to 39th out of the 50 states.[7] The long-term impacts of severe under-investment in higher education in general, and sub-baccalaureate curriculum in specific, are evident in Table 3, as is the effects of its dearth of systematic planning for higher education.

Table 3
Post-Secondary Enrollment in Illinois, Michigan, and Ohio

State	Total Population	Number 18-65 yr	% 18-65 yr	Enrollment in all Ed. as % population 18-64	Comm. College enrollment as % of population 18-64
Illinois	**11,830,000**	**7,220,000**	**61.0%**	**9.9%**	**4.7%**
Michigan	**9,549,000**	**5,848,000**	**61.2%**	**9.4%**	**3.5%**
Ohio	**11,151,000**	**6,801,000**	**61.0%**	**7.9%**	**2.2%**

Source: Statistical Abstract of the United States (1996). Table 34, page 33.

Illinois and Michigan created a single type of institution to deliver sub-baccalaureate education: the comprehensive community college. These institutions included academic/general education courses (to prepare students for transfer to baccalaureate degree granting institutions), as well as a wide range of vocational, occupational, and technical curricula for immediate employment. Ohio spread its limited financial investment across many types of institutions. In sum, Tables 1, 2, & 3 provide an important insight for Toledo, Lucas, and Ohio policymakers: ***Other states have done a better job than Ohio in planning and funding universal lifelong learning systems.***

[9] Seymour Harris, 1959; Ohio Board of Regents, 1997.

B. Financial and Institutional Variance Among Ohio Community Colleges

The methods and levels of financial support for Ohio's community colleges vary and those variations affect their size, range, and perhaps the quality of their programs. In Dayton and Cleveland about 25% of their total community college funding comes from local taxes and/or local government contributions, as the business and civic leadership of Cuyahoga and Montgomery counties have chosen to make such a long-term investment. In contrast, neither Owens Community College nor UT's Community and Technical College have received local funding. Local contributions can contribute to reduced tuition without impinging on educational quality, staffing, and equipment, while at the same time making it easier for low-income individuals to attend the college.

Cuyahoga, Sinclair, and Owens are all called "community colleges." This institutional inconsistency has important implications as local business and civic leaders consider the mix of post-secondary education services and programs needed in downtown Toledo. Concerns over this issue are not new. Governor Rhodes noted criticisms regarding the poor planning and patchwork of institutions delivering public two-year post-secondary educational programs and services. The 1970 Plan for Junior College Education for the Ohio Board of Regents proposed a transition to a single comprehensive community college system, with consistent funding, a common mission, and equality of programmatic access across all of the institutions, and the end of sub-baccalaureate university branch campuses. Neither that plan, nor the similar 1990's OBOR Managing For the Future study in 1992, was enacted.

Table 4
Changes in Enrollment at Public Two-Year Institutions in Ohio, 1992-1999

	Number	Fall 1992 Enrollment	Fall 1999 Enrollment	% Change (+/-)
Community Colleges	**6**	**64,452**	**60,217**	**-6.8%**
State Community Colleges	**9**	**26,748**	**57,663**	**+115.6%**
State Technical Colleges	**8**	**47,285**	**22,388**	**-52.7%**
University Branches	**36**	**40,394**	**40,980**	**+1.5%**
Total	***59***	***178,879***	***181,248***	***+1.3%***

Following the defeat of the recommendations of the Managing for the Future report, the Ohio Board of Regents began to allow state technical colleges to convert into state community colleges that offer general education for baccalaureate transfer. This change had two problems. First, the State of Ohio did provide financial support for technical colleges to change their missions, even if the resulting growth meant that staffs, facilities, and faculties would be greatly stretched. Second, the Regents failed to examine or address issues of curricular quality and staffing qualifications, despite the different institutional mission and goals implied by this new policy. Yet despite these problems, there has been dramatic enrollment growth in Ohio community colleges from 1992 and 1999.

Northwest Ohio has been an outstanding example of the impacts of equalizing programmatic access. Owens and Northwest State Technical Colleges grew as they added lower division general education curricula. Two interesting conclusions can be drawn from Table 5. First, the number of students taking lower-division courses at area community colleges has increased 43% between 1992 and 1999.[8] Significantly, this growth occurred *before* The University of Toledo closed its Community and Technical College on June 1999. The large increase of students in sub-baccalaureate programs in Northwest Ohio indicate the wisdom of Ohio Board of Regents' successful 1992 policy decision to convert technical colleges to community colleges and to offer a wider range of curricula.[9] Students are interested in securing a "comparable" or at least a state-guaranteed transferable education at significantly lower tuition.

Table 5
Enrollment Changes at Public Two-Year Institutions in Northwest Ohio, 1992-1999

	Fall 1992	**Fall 1999**	**% Change (+/-)**
Owens Community College	**10,159**	**16,775**[10]	**+65.1%**

[8] Conversations with community college officials suggest that the number of students taking lower-division general education, transfer-oriented courses at area community colleges may have doubled during this period. Data to support that assertion is not available.

[9] An alternative interpretation is that the additional 6,000 students in community colleges is a diversion from baccalaureate institutions. UT has lost almost 5,000 students and BGSU has had an increase of 2,000 students, indicating a net reduction of roughly 3,000 BA students in the area.

[10] These figures, as reported to the Board of Regents, can be confusing. The Owens figure includes over 14,000 students in Perrysburg and over 2,000 in Findlay. Also, the total FTE (Full-Time Equivalent) total for BOTH CAMPUSES Perrysburg is roughly 4,200 according to their website http://www.owens.cc.oh.us/owens-facts.html Thus, either almost none of the students are full-time (unlikely), or the figure includes many people who are taking one credit hour continuing education classes which may be of various durations, they have included people taking non-credit courses, or their website is in error. UT housed their 11,226 non-credit students in another college

Northwest State Community College	**2,054**	**2,297**	**+11.8%**
Terra State Community College	**2,924**	**2,557**	**-12.6%**
UT Community and Technical College	**4,100**	**3,800**[11]	**-**
New Change (+ or -)	**19,237**	**25,429**	**-**

Second, a pent-up demand for post-secondary, sub-baccalaureate education has existed in Northwest Ohio. Before 1990, experts in community college enrollment projections generally argued that enrollments were counter-cyclical to economic conditions. Northwest Ohio saw a large increase in enrollment despite the lowest local unemployment rate in at least three decades.

C. Summary

In reviewing the history of public two-year college development in Toledo, the state, and nation, we note that state policy before 1990 emphasized geographic not programmatic access. This rendered vastly different differing institutional forms, revenue streams, and financing mechanisms for Ohio community colleges. Such differences reflect local and state traditions, most notably, the lack of: a) sustained policy consensus regarding the need for investing in Ohio's human capital, b) a true system that provides universal access to a comprehensive range of sub-baccalaureate education beyond high school, and c) a comprehensive system to provide lifelong learning. State policy makers allowed state technical colleges to convert and deliver general education courses, due to their inability to secure passage of legislation to create a system of comprehensive community colleges. This change has had a great impact in Northwest Ohio.

PART II: ECONOMIC AND DEMOGRAPHIC CHANGES IN TOLEDO

By reviewing relevant demographic and economic data for the downtown Toledo, Toledo MSA, Lucas County, Ohio, the United States, and past consultant and agency reports on economic development, we will lay the groundwork for the potential consideration of a community college campus in Downtown Toledo.

(University College), and this figure has risen over the last 5 years.

[11] Enrollment for the University of Toledo Community and Technical College was for Fall 1998, not Fall 1999.

A. Demographic Considerations

Toledo, Lucas County and the Toledo Metropolitan Service Area have each lost population during the last decade, with the City having a 13.2% reduction in its population (Table #6). These reductions over 10 years have exceeded projections created in 1990 for a 25-

Table # 6
Population Trends and Projections in the Toledo MSA 1980-2000

	1980	2000	% Change 1980-2000
City of Toledo	354,635	307,946	-13.2%
Lucas County	471,741	446,482	-5.4%
Wood County	107,372	120,292	12.0%
Fulton County	37,751	42,202	11.1%
Toledo MSA	616,864	608,976	-1.3%

year period to 2015. Further, all projections suggest that a population shift will continue from Toledo/Lucas to Wood and Fulton, and that total MSA population will be stagnant.

Similarly, examining 1990 data and 1999 and 2004 projections from the U.S. Census (Table # 7), we observe minimal population density and population losses in the downtown area and nearby census tracts. They may explain why two sub-baccalaureate colleges, Davis College and Statzenberger College, left downtown in 1981 and 1991 respectively. As private colleges, their tuition must be sufficient to cover their costs of operation if they are to stay in business, and so they shifted to where populations were moving.

Table 7
1990-2004 Census Data Within a 2 and 5 Mile Radius from Downtown Toledo

	2 Mile Radius			*5 Mile Radius*		
	1990	*1999*	*2004*	*1990*	*1999*	*2004*
Total Population	48,814	47,415	47,604	270,346	268,587	274,549
Total Families	11,127	10,935	10,857	68,354	65,493	65,001
Total Households	18,699	18,579	18,761	104,243	103,042	104,308
Age 0 to 5	5,089	5,697	5,506	23,341	25,267	24,301
Age 6 to 11	5,949	4,807	4,901	28,784	23,753	24,121
Age 12 to 17	4,353	4,516	4,615	21,939	22,892	23,324
Age 18 to 25	5,415	4,528	4,261	30,882	26,054	24,515
Age 26 to 29	4,316	3,320	2,973	24,041	18,353	16,347
Age 30 to 54	13,819	14,778	15,523	82,275	86,785	91,189
Age 55 to 64	3,682	3,627	3,630	21,963	21,278	21,347

Age 65 to 74	3,540	3,280	3,143	20,933	18,959	18,109
Age 75 Plus	2,651	2,862	3,052	15,878	17,666	18,855

Source – Geolytics projections from the 1990 Census.

Examining spatial distribution of employment in the downtown area is also discouraging. As UAC Research Associate Jim LeSage noted (1994), the outflow of workers from downtown firms relocated from urban Toledo to *just* the Arrowhead Park area involved the exit of 81 firms and 7,600 workers. LeSage and Randall (2000) using Ohio Department of Development ES-202 data at the zip code area level shows that from 1989 to 1998, Toledo lost 4.6% of its employment base and 3.7% of its business, much of it from the center city/downtown area.[12] firm and employment growth moved from Toledo to the suburbs in the early 1990's, and subsequently to "outlying areas" beyond the traditional suburb ring since 1996. [13]

Taken by themselves, these data would probably not encourage a community to develop a college campus in its downtown area. Several other factors must be examined, including whether there is a pending age cohort "baby boom" that will require additional college capacity.

Nationally and within the Toledo MSA, some population growth will likely occur among persons who, in 1998, were nine years of age and younger, according to a 1998 Chamber of Commerce study.[14] By the year 2015, these young people will have reached traditional college-going age, 17-26 years old. Thus, after 2010, there may be a record number of persons reaching college age in the Toledo MSA. Examining Table #7-- U. S. Census data of recent, current, and projected populations *within two and 5 miles of downtown Toledo*-- we neither see indicators of general population growth, nor of the "9 or less in '98" (here 11 or less in '99) cohort during the next 5 years near downtown. The population of non-traditional student (24 years of age and up) will remain relatively stable during this same period, according to the Chamber of Commerce study, and our analysis of those students within 2 and 5 miles of downtown. Yet, Table 6, 7, and the Chamber data, engage in projections based on the assumption of the City of Toledo having

[12] Jim LeSage and Ronald Randall. "A Spatial Examination of Ohio's Economic Growth." Spring, 2000.
[13] A UAC report *City of Toledo Payroll Tax Revenue Annual Budget Projections and Long-term Trends* by Dr. Paul Kozlowski noted that the rate of tax revenue growth in Maumee, Sylvania, and Oregon had slowed since 1996 and was lower than that of the City and of those areas further from the City (UAC October 2000). This supports the observation that new firm growth and employment is occurring beyond those traditional suburbs. While the shift is important, we should note that rate increases are in part a function of the size of the existing base, which in those outlying areas was quite small before 1990.
[14] Toledo Area Chamber of Commerce, 1998, "Age Distribution: Toledo MSA" < www.toledochamber.com>

318,000 residents in 2000. However, the initial 2000 Census data indicate that Toledo's population is only 308,000, suggesting all subsequent projections may be slightly over-estimated.

Thus, the need for sub-baccalaureate education cannot be based solely on the growth of the adjacent population of workers or residents. It must be predicated on expanding workforce training and (sub-baccalaureate and baccalaureate) general education to aid *existing* workers and on the increasing pool of well-educated workers as part of an economic development effort.

B. Economic Considerations

The growth of most employment sectors in the Toledo MSA has ranged from modest to strong during the late 1990s. Between 1995 and 1998, the MSA gained close to 11,000 jobs, a 13% increase. As in most regions, the service sector is the largest employer in the Toledo MSA, followed by retail/wholesale, manufacturing, and government (Table 8).

Table 8
Historic Employment Trends 1995-1998, Toledo MSA

SECTOR	1995	1996	1997	1998	% +/-	% Tot.
Service	**82,849**	**82,721**	**89,800**	**93,600**	**13.0 %**	**29.1%**
Wholesale / Retail	**76,076**	**77,061**	**79,000**	**79,400**	**4.0%**	**24.6%**
Manufacturing	**59,533**	**61,022**	**60,800**	**60,400**	**1.5%**	**18.8%**
Government	**38,338**	**38,630**	**46,600**	**47,100**	**22.9 %**	**14.7%**
Transportation	**13,126**	**13,001**	**14,000**	**14,500**	**10.5 %**	**4.5%**
Construction	**12,148**	**14,248**	**14,900**	**15,300**	**25.9 %**	**4.8%**
Finance and Insurance	**10,245**	**10,392**	**10,900**	**11,200**	**9.3%**	**3.5%**

The single strongest sector for growth has been construction. The construction trades have added 3,500 new workers since 1995, thereby increasing their ranks by 25.9%--the largest percentile increase of any sector in the Toledo MSA. The construction boom may be a response to delayed maintenance and to this decade's economic resurgence.

Toledo has historically been a center of auto and glass manufacturing. Following unemployment rates of 12.6% in 1983, a more balanced economy has emerged. By 1998, the

unemployment rate was merely 4.9%. While many leaders still promote Toledo's well-trained manufacturing workforce in efforts to lure businesses to the area, manufacturing has been the slowest growing of *all* sectors, growing at a rate of only 1.5% between 1995 and 1998.

It is useful to augment these data with projections to the year 2006 provided by the Ohio Bureau of Employment Services (OBES). Using the same categories, OBES suggests (table #9) that construction, wholesale/retail, services industries, and government employment will continue to grow while manufacturing will shrink another 1.5%. Sectoral shifts evident in Table 9 strongly suggest the need for educational and training programs to prepare workers for new occupational opportunities by teaching them needed skills and providing new knowledge.

Table 9

Projected Employment Needs for the Toledo MSA, 1996-2006

Sectors	1996 Base	2006 Projections	Change Number	Change Percent
Service	87,900	107,500	+19,600	+22.3%
Wholesale/Retail	78,400	85,600	+7,200	+9.2%
Manufacturing	61,000	60,100	-900	-1.5%
Government	46,200	49,200	+3,000	+6.5%
Transportation	14,300	14,300	0	0%
Construction	14,800	17,100	+2,300	+15.5%
Finance and Insurance	10,700	11,200	+500	+4.7%

Source - Ohio Bureau of Employment Services, (1996), Toledo MSA: Industry Employment Projection Report, 1996-2006. Columbus, Ohio.

C. Summary

In sum, significant economic and demographic shifts are occurring that constitute a need for retraining and skills enhancement. Failing to act to develop new opportunities will only exacerbate the demographic shifts away from downtown thereby further reducing the incentives for residents and businesses to locate in that area.

PART III: COMMUNITY COLLEGE AND SUB-BACCALAUREATE FUNCTIONS IN DOWNTOWN TOLEDO

A. Educational Attainment in Ohio, Lucas County, and Toledo

The most important justification for expanding educational services can be found in examining the educational attainment trend data. The education gap between Ohio and the rest of the nation has continued to grow larger over several decades. According to OBOR, 10% fewer Ohio students had *ever attended* college in 1995 than was the average throughout the rest of the nation. At the same time, fully 17% fewer Ohioans had attained an Associates degree.[15]

A recurring myth in Ohio is that the funding for public higher education places Ohio among the leading states in the union. As Roderick Chu, Chancellor of the Ohio Board of Regents has noted, Ohio was among the 12 bottom states in the percentage of its adult population with a bachelor's degree. Ohio's *education deficit* is of such magnitude that *just to bring Ohio to the U.S. average,* over 400,000 more Ohioans would need to have completed some college,

[15] Ohio Board of Regents. (1995). Higher Education Funding Commission: Demographic forecasts, educational attainment and sponsored research in Ohio. Columbus, OH. Page 3.

nearly 300,000 would have needed to complete an Associate degree or higher, over 225,000 would have needed to complete a bachelor's degree or higher, and just under 100,000 would have needed to complete a graduate or professional degree.[16]

As Chu explained, the under-investment in higher education represents a ticking time bomb for policy makers at the state and local levels. Increasingly, new firms seek to locate in areas that have the widest possible range of educational programs, from Associates through professional and graduate degree programs, and to not invest in those areas without them. *Educational retraining and skills enhancement is especially important in Ohio, which is projected to have only a 1% increase in net high school population through 2010; one of the 15 smallest increases by a state.*[17]

A comparison of the educational attainment of the City of Toledo and Lucas County in Table 10 shows that they are fairly typical of Ohio, including the fact that in every category they significantly trail the U.S. average. It also indicates that the number of people who have attended "any college" in Toledo and Lucas is above the Ohio average. Within the City (but NOT the county), those "completing a college degree" are below the Ohio and national average. Across the board, educational attainment by Toledoans is only 2/3rd of the rate of the US average. ***The rates of educational attainment and degree completion within 2 and 5 miles of downtown Toledo are all stunningly deficient, ranging from 1/3rd to 1/6th of the national average!!***

Table 10[18]

Comparison of Educational Attainment in Toledo, Lucas County, Ohio, and the U.S.

	<2 miles Downtown	**<5 miles Downtown**	Toledo	Lucas	Ohio	U.S.
High School Degree	**38.5%**	**51.8%**	73.2%	76.2%	75.7%	75.2%
Complete any college	**16.5%**	**26.6%**	39.5%	42.8%	39%	45%
Completed AA or more	**6%**	**11.7%**	20.3%	23.5%	22%	27%
Completed BA or more	**3.6%**	**5.2%**	14%	17%	17%	20%
Completed Grad/Prof. Degree	**1.2%**	**2.3%**	4%	6%	6%	7%

[16] Winter 2000 *Ohio Economy p. 1-4.*

[17] Projections of Educational Statistics Through 2010. National Center for Educational Statistics. http://nces.ed.gov/pubs2000/projections/chapter3.html

[18] Data from 1990 Census and from Roderick Chu, *The Ohio Economy* 1/2000.

Rates show need, not potential demand. The distribution of educational attainment in Toledo and Lucas County (Table 11) shows that there are thousands of people who could avail themselves of sub-baccalaureate, baccalaureate, and graduate programs. The pool of potential post-secondary attendees is very large as indicated in the shaded raw data. Potentially 17,000 within 2 miles and 108,00 within 5 miles have completed high school and could participate in a community college Associate degree, and they, plus 1,183 within 2 miles and 11,414 within 5 miles, could undertake a baccalaureate degree at an open admission state university (see shaded areas). An additional 10,000 citizens within 2 miles, and 40,000 citizens within 5 miles could avail themselves of GED and/or vocational training, despite having not completed high school.

Table 11
Educational Attainment in Toledo and Lucas County (1990)[19]

	< 2 miles from downtown	<5 miles from downtown	Toledo	Lucas County
Population over 25 yrs of age			206,870	289,965
Population w/ < 9th grade Education	4,983	16,271	17,720	21,792
Population w/ 9-12, No degree	9,873	39,569	37,799	47,121
Population w/ High School degree	**10,716**	**68,183**	69,614	96,747
Population w/ any college	**5,129**	**40,279**	39,721	56,017
Population w/ Associate Degree	**1,183**	**11,414**	12,937	18,895
Population w/ Bachelor's Degree	**1,194**	**13,983**	19,216	31,895
Population w/ Grad/Prof. degree	593	6,201	9,863	17,415

These figures do not include individuals who work downtown and live elsewhere and those with baccalaureate degrees who might seek specific retraining. **Thus, the size of this pool of ready and potential students and the extent of their educational deficiency (relative to state and US norms) may justify an additional sub-baccalaureate institution in the downtown area** and could do so without necessarily impinging on the populations of existing colleges.

Yet, this unrealized educational attainment begs the question: *What factors discourage degree completion?* Only a survey of people who initiated but failed to complete any college degrees can identify the reasons for this pattern of collegiate under-achievement. Such studies

have been done in other locales and generally show that financial reasons are the best predictor of why students fail to complete their degree programs.[20] Generally, students who lack adequate transportation and childcare are most at risk to financial pressures.

Two factors that *may* underlay this pattern are costs of attendance and transportation.

The State of Ohio has significantly reduced its per student subsidy since 1988. As a result, tuition increases in Ohio's public universities have repeatedly been at or near the state maximum of 6% per year. Institutions have struggled to maintain their budgets and program quality, as the state has transferred the cost of education from the public/state to the student and their families. The burden of increased tuition falls most heavily upon those with the least resources—people who disproportionately populate center cities such as Toledo.

There are two low cost community colleges adjacent to Toledo. Owens Community College in Perrysburg and Monroe Community College in Erie and Monroe Michigan have traditionally provided affordable Associate degree programs for Toledo-area citizens. Owens' $75 (and $78 at MCC) per semester hour fee means that a student taking a 12 semester hour load will pay approximately $1,800 per year, excluding books and related essentials. By contrast, the University of Toledo's Community and Technical College achieved its peak enrollment of 5,000 students in 1992, when tuition was roughly $3,000 per year. By 1999, tuition and fees at ComTech topped $4,000. Thus, one factor possibly dampening completion of Associate degree programs may have been (and may continue to be) the high tuition of the only public provider of such courses and degrees in the City and County.

State policies in the 1990s magnified these cost differences. In 1999 the Ohio Board of Regents created its Access Challenge Program to promote lower tuition and higher enrollment at its lower-cost two-year colleges. The result of the relatively high tuition charged by universities was to push students away from institutions such as UT to lower tuition community colleges. With declining enrollments further pressured universities to raise tuition by the full 6% per annum. Owens' (and other community colleges') enrollment rose and UT's fell from 1992 to now, suggesting that cost is a critically important factor in college attendance.

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[19] Data from the Regional Growth Partnership. Taken from 1990 U. S. Census.

[20] This is why local financial contributions are so crucial in a high tuition, low state-finance state such as Ohio.

Owens and MCC are about 6 and 8 miles, respectively, from downtown Toledo. TARTA buses currently provide commuter service for about 875 passengers per week between Owens Community College's Perrysburg Campus and Downtown. An unknown number of students take the Owens' shuttles from downtown. There is no mass transportation to MCC. For most mass transit riders, a trip to Owens requires changing buses downtown. Similarly, mass transportation to any UT campus almost always involves changing buses downtown. For anyone unwilling or unable (due to daycare or work concerns) to spend the time or to tolerate the frustration of transferring buses, public college attendance depends upon the availability of personal transportation, with its incumbent expenses of repairs, insurance, car loans, etc.

The need for additional educational attainment among Toledo residents is clear if Toledo is to participate in the new economy. Reducing the costs, the number of mass transit transfers, and time away from work or home *may* be viable methods of increasing collegial degree completions. Increasing the rates of educational attainment and degree completion, and removing impediments to achieving those outcomes and the existence of a substantial pool of under-educated individuals structurally indicates a strong justification for a sub-baccalaureate and/or baccalaureate college in downtown Toledo.

B. Sub-Baccalaureate Programs and Services in Downtown Toledo

Cohen and Brawer's authoritative work The American Community College (1996) suggests that five core functions of community colleges have evolved over the century. This section will examine these core functions and explore and evaluate the void that exists in the delivery of these services in downtown Toledo and Lucas County following the closing of Lucas County's only dedicated public community college, the University of Toledo's Community and Technical College (ComTech). Such discussion is important in conceptualizing what kind of sub-baccalaureate services might be appropriate for Downtown Toledo and Lucas County.

The five functions are (1) general education/academic transfer, (2) occupational, vocational and technical education, (3) continuing education, (4) developmental or remedial education, and (5) community services (1996, pp. 21-24). In Cohen and Brawer's scheme, areas such as economic and workforce development can be subsumed under continuing, vocational, and perhaps developmental education as well if such services are needed, as is often the case.

It is important to note that most of this section focuses only on those sub-baccalaureate education programs and services that publicly controlled institutions offer. This is not a serious mission because, unlike other urban areas of Ohio, private independent higher education is not a substantial portion of the higher education complex in the Toledo area or in Downtown Toledo.[21]

There is one private college--Mercy College of Northwest Ohio--located on the edge of downtown (in the uptown/Art Museum neighborhood) about one mile from downtown. It is an accredited college that offers Associate degree programs in 5 (health related) areas and which in Fall 1999 had 209 students enrolled and in Fall 2000 they had 227 students. Starting in Fall 2000 they began to grant a BSN (Bachelor of Science in Nursing) and 26 of their students were at the post-Associate level.[22] They offer general education courses in social science, humanities, mathematics, and natural science, as part of those programs. While they may offer quality programs, they are a small college with a narrow range of offerings and limited facilities at this time.[23] Thus, if post-secondary education, workforce training, and lifelong learning programs are to be available at the sub-baccalaureate level to the citizens of Toledo and Lucas County, the key will be the development of an appropriate capacity in the area's publicly-controlled institutions.

Table 12 presents the functional type of sub-baccalaureate education that public institutions offer in downtown Toledo. It compares them to what Owens Community College's main campus offers, what services the University of Toledo's Community and Technical College once provided, and the present availability in Downtown Toledo. It shows **that a full range of sub-baccalaureate functions was *never* available in downtown Toledo**. Owens has not had publicly accessible physical location within the City of Toledo. The University of Toledo did possess a dedicated institution—it's Community and Technical College--with a wide range of

[21] The Regional Growth Partnership's Economic Development FactBook listed Lourdes College, Heidelberg College, Davis College, and Stautzenberger College under the heading "community college." Lourdes is in fact a four-year independent, non-for-profit college, as is Heidelberg College, which has only a limited presence. Neither is actually located in Toledo. Davis and Stautzenberger Colleges are proprietary for-profit institutions and offer sub-baccalaureate degree and certificate programs. Their combined enrollment for the Fall 1998 term, according to the FactBook, was only 820, as compared to nearly 16,000 for Owens Community College and 3,000 for UT's ComTech. Thus, the enrollment and degree offerings of area private colleges show that together they serve about 1,000 total students or roughly 1/20th of the public sector.

[22] "Record of Status and Scope," Mercy College of Northwest Ohio. NCSA Commission on Institutions of Higher Education 6/2000. These numbers were verified and the year 2000 numbers and other details were ascertained in telephone conversations with the President and Registrar of Mercy College on 1/13/01.

[23] The Regional Growth Partnership's Economic Development FactBook fails to note their existence as a college.

sub-baccalaureate functions at their Scott Park campus in west Toledo before its closure. However, the changes at UT are more complex in their range, scope, and breadth than is commonly understood. ComTech was part of the larger UT effort to provide credit and non-credit courses and training downtown. Essentially, all of the curriculum and faculty of ComTech were incorporated into other UT colleges, and Associate degrees in those curricula are still awarded by UT. UT has also retained their remedial, counseling, and advisory services, and non-credit training capacities.

Table 12
Sub-Baccalaureate Education Offered by Public Institutions and in Downtown Toledo

Sub-Baccalaureate Education Type	Educational Objective	Offered @ OCC-Perrysburg	Previously offered by UT ComTech	Available in Downtown Toledo
General Education & Transfer	Mobility to BA granting colleges	yes	yes	UT-Some*
Vocational, Occupational +/or technical education	Terminal training => employment + lifelong learning	yes	yes	UT-Some*
Continuing Education	Maintain socio-economic status (for people w/ BA)	Some, but not @ advanced skill levels	Some	UT-Some*
Developmental Education	Basic skills need for college or work	yes	yes	UT-Some*
Community Service	Non-credit courses & workforce training	yes	yes	UT-Some*

Collectively the UT colleges (including subsumed ComTech programs) provided courses to approximately 4,600 students in the Seagate and Museum campuses and in a few downtown offices and factories in 1999-2000. Another 6,364 were taught elsewhere in Toledo but off the Bancroft and Scott Part campuses (See Table #13). Other UT programs offer training and encourage economic development, including UT's Urban Affairs, Economic and Community Development, and Family Business centers, and the Community Outreach Partnership Initiative.

Table 13
Enrollment in UT Programs Located Outside of the Bancroft and Scott Park Campuses

	Total # students	Total # Courses	% students Downtown	% taught in Toledo	% taught in Lucas Co	Headquarters & Staff Site
Museum Campus	1,700	250	100%			Museum
Continuing Education	11,226	1,245	26.2%	56.7%	8.6%	Seagate
Contract Education	3,000	314	2%	60%	8%	Seagate

Distance Learning	2,600	100	?	80%	?	Seagate

Thus the perception that UT no longer offers Associate degrees and does not offer courses downtown is inaccurate. While UT does not provide a full range of degree or a comprehensive curricula downtown, but does partially meet each of the five functions identified by Cohen and Brawer. What is true however, is that as a higher cost institution with a more restricted range of programs, UT's ComTech was never really a comprehensive community college as is generally understood by experts across the country.

C. The New Economy Comes To Toledo and A New Response is Needed

If this functional void is real, there should be external validation of this problem. Nationally, analysts across the ideological spectrum have recognized the economic benefits of educational attainment from high school, to college, to graduate school. From 1993 to 2000 there have been five major external studies of business location and economic development: The 1993 Toledo Lucas County Port Authority's *Strategic Assessment of the Toledo Area Economy* conducted by Iannone & Associates (1993), the 1995 PHH Fantus Consulting report *Labor Market Assessment* commissioned by the Regional Growth Partnership, the *Job Training Task Force Report* conducted by Human Resource Investment Council for the Governor of Ohio, *Final Report and Recommendations* by the Toledo Competitiveness Council for the Mayor of Toledo, and the *Downtown Toledo Strategic Plan* conducted by Downtown Toledovision. In each study, the need for additional training to improve student preparedness from K-12 and on,[24] to invest in knowledge-creating/technology-using capacities, and to engage in strategic investment in key industry clusters to maximize Toledo's economic advantages. Interestingly, the participation of UT's ComTech was limited and that of Owens non-existent in these studies.

The recommendations of each of these reports require the development of an entity that delivers post-secondary education and related workforce training programs on a regional basis and in more accessible locales. The fact that little attention is paid to Owens and ComTech as community colleges may reflect the biases of local leaders who formed such business and regional-development groups. As the Fantus study noted, "most businesses are not aware of

[24] Only 51% of the graduates in the 1998-1999 academic year from TPS high schools enrolled on a full-time basis at some institution of higher education in the fall following graduation. About 5% enrolled on a part-time basis.

community colleges and other training resources that can improve effectiveness and productivity."[25] The emphases of these consultant studies suggest the need for more visible and accessible community college/sub-baccalaureate activities if greater K-16 cooperation in skill development and lifelong learning activities are to be created within Toledo. Many cities have a dedicated public community college as part of the sub-baccalaureate and workforce training complex and as an active participant in economic development. And many cities, including Miami, Houston, Cleveland, and Dayton, have only one public school system, one community college system, and one public university. ***Thus, workforce training may be lagging, and the educational attainment void may exist due in part to the absence over many decades of a properly funded, comprehensive public community college within Toledo.***

Next, it is important here to address concerns some would raise regarding the age-old saw, duplication of academic programs among institutions. *There is **never** a problem with duplication of academic programs if all are fully enrolled.* There are a number of academic degree programs at the Associate degree level offered by both Owens Community College and UT. If the programs are fully enrolled, then needs of enrolled students and (through the exercise of the market) societal needs are being met, but those of other members of society *may or may not be satisfied*. This does not mean that a new downtown community college campus should necessarily mirror the associate degree offerings in existence at Owens and UT. Also, since there may be curricula and/or training areas that neither (or both) college currently offers, institutional cooperation might be initiated to minimize impacts on existing campus programs.

A tradition of institutional cooperation exists among public two- and four-year institutions of higher education in Northwest Ohio, despite the rather disjointed history of early institutional development in Ohio. Public four-year institutions fully understand the need to work together on articulation, transfer, and joint programming to better serve students, and have created several shared programs.[26] Faculty and administrators on these campuses created these relationships based on shared expectations, standards (including tuition) and faculty skill levels. They have

[25] PHH Fantus Consulting August 1995, *Labor Market Assessment*, Pg. 32.

[26] At the master's level, the Medical College of Ohio, Bowling Green State University, and the University of Toledo have partnered to create a Master's of Public Health degree. At the upper division of undergraduate level, the three institutions jointly operate a BA program in Nursing. Also, Bowling Green State University and the University of Toledo have begun development of the BA degree in Recreation with an emphasis on Therapeutic Recreation.

agreements with sub-baccalaureate institutions,[27] but these occurred only in response to state pressures and without faculty support, and while operational are continuing sources of concern.[28]

Nationally, the research literature is clear: where faculty and administrators establish issues of comparability, quality, and shared standards, such cooperative agreements work well. Inter-institutional agreements work among institutions that come to the table as full partners. These lessons—inclusion of faculty and building upon inter-institutional cooperation—are important if additional institutional involvement in downtown post-secondary training is desired and if a seamless transition and life-long learning are goals.

D. Local Labor Market Needs

In October 2000, the Regional Growth Partnership and the Toledo Chamber of Commerce released the *Workforce Needs Survey*. Of the 3,000 Northwest Ohio employers queried for the survey, 224 responded. While this study has serious limitations, it is the only study of the issue completed during the last few years.[29] Regional employers were asked questions regarding current and perceived workforce needs, and workforce competencies and needed skills. Because of the relevance to this study, several tables from that report are cited in full and analyzed here.

Tables 14 through 17 involves responses from employers across *all industrial sectors*. Table 14 shows that more than 75% of respondents indicated that Reliability, Motivation, Teamwork, Communication, and Literacy were "most important" or "somewhat important" and were essential competencies or abilities needed to operate *their* business. When asked what specific skills members of *their* firms would need to possess during the next five years, respondents' answers in Table 15 roughly mirrored Table 14, except noting the need for communication among their employees as a far higher priority.[30] Survey respondents from all

[27] UT and BGSU signed a Transfer Covenant with northern Ohio community colleges, including Owens, in 1997 to guarantee acceptance of a thirty-seven hour block of general education courses earned by students attending any two-year college.

[29] The small response rate is only one problem. The data lacks indicators of being representative of the larger sample of firms, relative to firm size, geographic distribution, sector size, annual revenues, among others—basic information that would indicate the relationship between this sample and the full population and that would allow for "statistical adjustments" to standardize those responses by re-weighing the responses. Thus, these findings are inferred to be indicative of larger trends, but they are not argued to be representative of businesses in Northwest Ohio generally or of Toledo in particular.

[30] There is a table of perceived skill requirements identified by workers generally similar (+/- 7%) to that identified by firms, except that employers value communication (+ 15%) more than workers do.

sectors were asked which formal credentials have the greatest value to each workforce skill. Table 16 shows

Table 14
Workforce Competencies (All Sectors)
"Which workforce competencies represented the greatest need for development in Your business?"

Workforce Competencies	Most Important	Very Important	Most&Very Important	No Opinion	Somewhat Important	Least Important	Not Applicable
Reliability	125 (55%)	84 (37%)	**209 (92%)**	0 (-)	4 (1%)	1 (-)	10 (4%)
Motivation	93 (41%)	101 (45%)	**194 (86%)**	9 (4%)	6 (2%)	1 (-)	14 (6%)
Teamwork	89 (39%)	102 (45%)	**191 (84%)**	3 (1%)	13 (6%)	1 (-)	16 (7%)
Communication	94 (42%)	92 (41%)	**186 (83%)**	6 (2%)	17 (7%)	0 (-)	15 (6%)
Literacy	81 (36%)	98 (43%)	**179 (79%)**	2 (1%)	26 (12%)	6 (2%)	11 (5%)
Continuous Learning	62 (27%)	109 (48%)	**171 (75%)**	9 (4%)	19 (8%)	1 (-)	24 (11%)
Management	31 (13%)	77 (34%)	**108 (47%)**	16 (7%)	47 (27%)	10 (4%)	43 (19%)

Table 15

Changes in Skill Requirements for Companies
"What changes in skill requirements for your company do you see over the next 5 years?"

Skills Requirement	Significant Change	Some Change	***Significant & Some Change***	Little Change	No Change
Computers	76 (36%)	75 (35%)	***151 (71%)***	35 (16%)	27 (13%)
Continuous Learning	60 (29%)	77 (38%)	***137 (67%)***	39 (19%)	28 (14%)
Communication	43 (22%)	86 (43%	***129 (65%)***	41 (21%)	28 (14%)
Teamwork	57 (30%)	68 (35%)	***125 (55%)***	36 (19%)	32 (17%)
Management	36 (19%)	84 (44%)	***120 (63%)***	45 (23%)	28 (15%)
Motivation	45 (23%)	70 (36%)	***115 (59%)***	45 (23%)	33 (17%)
Reliability	38 (20%)	68 (35%)	***106 (55%)***	54 (28%)	34 (18%)
Literacy	11 (6%)	69 (36%)	***80 (42%)***	72 (37%)	41 (21%)
Machining	15 (8%)	29 (15%)	***46 (23%)***	44 (22%)	109 (55%)
Robotics	9 (5%)	23 (13%	***32 (18%)***	30 (17%)	114 (65%)
Construction	8 (5%)	23 (13%)	***31 (18%)***	32 (18%)	114 (64%)

that survey respondents believed that the high school diploma, technical certificates, two-year degrees, and four-year degrees all had viability in meeting skill requirements and behavioral expectations. The most significant finding was that employers looked to colleges and universities that award four-year degrees for leadership in credentialing persons for management and to lead in continuous learning. Surprisingly, many employers saw behavioral skills as an important

contribution of the 4-year college and not decreasing relative to 2-year colleges (Table # 16 shaded area).

Table 16
Employer Perceptions of Relationship Between Formal Credentials and Workforce Skills
"Which formal credentials have the greatest value to each workforce skill?"

Skill Requirement	High School Diploma	2 Year Degree	4 Year Degree	Technical Certificate	Master's Degree	Other
Computers	51 (27%)	**56 (29%)**	**43 (23%)**	36 (19%)	3 (2%)	1 (1%)
Management	40 (21%)	**29 (15%)**	**91 (47%)**	11 (6%)	19 (10%)	2 (1%)
Continuous Learning	69 (36%)	**48 (25%)**	**48 (25%)**	15 (8%)	6 (3%)	4 (2%)
Communication	94 (47%)	**43 (22%)**	**47 (24%)**	6 (3%)	3 (2%)	3 (2%)
Literacy	109 (55%)	**41 (21%)**	**36 (18%)**	6 (3%)	3 (2%)	2 (1%)
Motivation	103 (54%)	**41 (21%)**	**36 (19%)**	6 (3%)	3 (2%)	7 (4%)
Teamwork	106 (55%)	**37 (19%)**	**36 (19%)**	6 (3%)	3 (2%)	4 (2%)
Reliability	118 (62%)	**28 (15%)**	**27 (14%)**	7 (4%)	2 (1%)	8 (4%)
Construction	68 (49%)	19 (14%)	6 (4%)	32 (3%)	2 (2%)	9 (7%)
Robotics	59 (45%)	17 (13%)	14 (11%)	31 (24%)	2 (2%)	9 (7%)
Machining	65 (46%)	17 (12%)	6 (4%)	44 (31%)	1 (1%)	9 (6%)

Comparing tables 15 and 16 demonstrates that employers saw technical certificates as valuable for meeting skill requirements in computers, construction, robotics, and machining. Each of these skill areas is typically part of technology-related fields that Associate degree programs emphasize. Employers looked to the high school diploma as a vehicle to provide basic skills, but clearly saw these as a minimum requiring significant additional training and education.

Table 17 presents the survey respondents' perceptions regarding the source of workforce training most likely to be used by all employment sectors. The category, "community colleges and technical schools," was the top rated institutional source to meet computer skills for the workforce, as well as for providing continuous learning, and machining. Community colleges and technical schools were also highly rated as a source to provide skilled workers in robotics and communication. Again, as expected, universities were most highly rated in the management category. These responses probably reflect the existing level of educational attainment of the workforce, past experience of the respondents, and may (absent data on the location of respondents) reflect the proximity of a nearby college or university. Regardless, they suggest strong support for additional community college and baccalaureate level education in the region. It should be stressed that the

Survey reflects views of executives from existing companies, not those that Toledo would seek to lure here, many of whom may have higher expectations.

Table 17
Source of Workforce Training Most Likely to be Used by All Employment Sectors

Skill Requirements	Comm. & Technical Colleges	Vocational Schools	Public& Private High Sch.	Colleges & Universities	Private Training Consultants	Industry & Trade Associations	Other
Computers	**74 (44%)**	**19 (11%)**	**13 (8%)**	**38 (23%)**	**21 (13%)**	**12 (7%)**	**2 (1%)**
Continuous Learning	**51 (28%)**	**19 (11%)**	**20 (11%)**	**37 (21%)**	**25 (14%)**	**26 (14%)**	**2 (1%)**
Machining	**33 (26%**	**31 (24%)**	**16 (12%)**	**6 (5%)**	**6 (5%)**	**30 (23%)**	**7 (5%)**
Literacy	**42 (24%)**	**17 (10%)**	**66 (37%)**	**29 (16%)**	**14 (8%)**	**7 (4%)**	**2 (1%)**
Communication	**39 (22%)**	**12 (7%)**	**48 (27%)**	**32 (18%)**	**35 (20%**	**8 (5%)**	**2 (1%)**
Robotics	**26 (22%)**	**23 (19%)**	**18 (15%)**	**10 (8%)**	**6 (5%)**	**24 (20%)**	**12 (10%)**
Management	**36 (20%)**	**15 (9%)**	**12 (7%)**	**74 (42%)**	**23 (13%)**	**15 (9%)**	**2 (1%)**
Motivation	**33 (19%)**	**15 (9%)**	**38 (22%)**	**27 (15%)**	**42 (24%)**	**14 (8%)**	**7 (4%)**
Teamwork	**33 (19%)**	**17 (10%)**	**37 (21%)**	**26 (15%)**	**48 (27%)**	**13 (7%)**	**4 (2%)**
Reliability	**32 (19%)**	**16 (9%)**	**56 (32%)**	**21 (12%)**	**30 (17%)**	**9 (5%)**	**9 (5%)**
Construction	**22 (18%)**	**30 (25%)**	**15 (13%)**	**5 (4%)**	**5 (4%)**	**32 (27%)**	**11(9%)**

There is an additional factor that must be acknowledged. Upgrading skills and increasing educational attainment bestows significant economic advantage upon the students. As Table # 18 shows, it reduces vulnerability to occupational displacement and increases one's average salary, attributes that benefit both the individual, and via taxes the community, not just the firms.

Table # 18
Earnings and Unemployment Rate by Degree Attainment

	Median Personal Earnings	**Unemployment Rate**
Less than High School	$18,000	7.5%
High School Graduate	$22,382	3.5%
Some College	$30,000	3.4%
Associate Degree	$32,000	2.7%
Bachelor Degree	$40,000	2.0%
Graduate Degree	$54,000	1.5%

Source—Bureau of Census, Current Population Survey 3/99.

E. Downtown Economic Development; The 800-Pound Gorilla

One additional aspect of economic development requires exposition. Thousands of residents of Toledo and Lucas County journey each week to the Owens' campus in Wood

County[31] (and dozens more to Monroe Community College's Whitman campus). Colleges, like other institutions have a multiplier effect as auxiliary services and businesses locate near the campus. For example, a community college with as few as 1,000 students in downtown might have a net impact of about $8 million per year.[32] When Toledo and Lucas County residents obtain their education in Wood County, they help to create new businesses that, if they were attending college in Toledo, would have been created in Toledo. Impact of Owens growth can be seen by the new businesses that have sprung up on the border of their Perrysburg campus. The unseen losses resulting from their actions include Lucas County "losing" sales tax, the City employment tax, and the schools property tax revenues that they would capture from the local expenditures, salaries, and investments. Downtown even loses a potential housing "draw," since some students would surely move to nearby neighborhoods, spurring increased occupancy, building rehabilitation, and new housing starts.

F. Summary of Economic and Workforce Development Data

The Information Age has come to a city that for decades has been a leader in manufacturing. Although UT continues to provide a significant level of sub-baccalaureate credit/non-credit programs and baccalaureate education in downtown Toledo, employers perceive a significant void of sub-baccalaureate technical training. Outside experts identify the need to develop a coherent workforce training and life-long learning environment if Toledo is to attract new and enhance existing businesses. There is no question that institutional competition between ComTech and Owens hindered creation of a seamless system of life-long learning. Creating a

[31] Requests for information on the total number, and the number of students from Lucas County, Toledo, and zip codes 43605, 43604, 43602, 43624, 43609 (the downtown area) was filed on 11/20/00 and despite several follow-up telephone calls, including with VP Paul Unger, no information has been provided.

[32] It is impossible to accurately project the impact of such an institution without extensive research. It is possible to provide rough indicators to at least illustrate the concept and its possible implications for Toledo. A review of 7 appropriate studies from across the US suggests direct multiplier effects of a local community college ranges from 1.8 to 3 times the net operating revenues, with an average direct multiplier of 2.33 times. Assuming a downtown community college received $2,000 tuition and $1200 state subsidy per student and $300 other funds and it had 1,000 students, it would have an "economic footprint" of $8.15 million dollars. If it had 5,000 students, it would be $40.8 million. (Ryan 1983, New Jersey 1983, Andrews and Lillibridge 1990, Winter and Fadale 1991, Johnson County 1995, Lillibridge 1995, Jernigan 1995). On the other hand, if roughly half of the 1000 students moved from UT with its' tuition and state subsidy to the downtown community college, the net economic impact *across the city* might offset the advantages of 500 new students, but would shift the multiplier impact from the Bancroft area to downtown.

world-class workforce requires the full integration of the key entities that produce a workforce: including the public schools, a community college, and the locally based public university.

Seeking to create a cost-competitive educational institution that would be an engine of downtown economic development and a boom to City and County revenues is a legitimate justification for developing a sub-baccalaureate institution in downtown Toledo. Achieving those goals, while increasing the skill levels, the educational attainment and degree completion rates, and improving family stability, would render a "win-win-win-win-win" outcome.

PART IV. - FINDINGS, OPTIONS, AND CLOSING THOUGHTS

This report addressed three major research questions. Each is summarized below and followed by recommendations for programming and policy including financing mechanisms.

1. What lifelong education/postsecondary training and related educational services do the business community, government officials, and residents in the City of Toledo and Lucas County believe are needed to keep the workforce current in the information age?

Strong indications of a need for additional educational attainment was evident, relative to the national, state, and even County norms, and a severely under-educated workforce was demonstrated to exist within a 2 and 5 mile radius of downtown. The doubling of Owens Community College enrollment juxtaposed with the strongest regional economy in a generation– strongly indicates a pent-up but cost-sensitive, demand for postsecondary training and related educational services in the City of Toledo and Lucas County. All of the economic development consultants have indicated a need for a better-trained workforce, and have argued for additional credit, and non-credit courses at sub-baccalaureate, baccalaureate, and post-baccalaureate levels.

Despite the abolition of ComTech, UT annually serves thousands of students in the downtown area, offering credit and non-credit courses at the certificate, sub-baccalaureate and baccalaureate level, in two existing downtown sites. They provide educational counseling and remediation programs to under prepared students, and provide economic and organizational assistance to downtown businesses, government, and neighborhood groups. The Associate degree programs previously in ComTech are still available on the Bancroft Campus. However, the bottom line is that UT's current roster of post-secondary offerings in downtown is insufficient. It is clearly in the best interest of the City of Toledo (and Lucas County) to secure a

comprehensive post-secondary institution of higher education needs to be created to assure course availability, seamless transfer, and lifelong education opportunities in downtown.[33]

2. Is there an advantage to locating educational services close to perspective students, to government offices and downtown businesses, and in proximity to the region's principal transportation hub?

There is a void of educational attainment in this locale and the potential market for both skill enhancement and degree-focused education (especially at the post-secondary level) is evident. Proximity to the mass transportation hub would advantage low-income individuals and/or those with childcare, work release, or other time-based constraints.

3. What types of institutional arrangements might most effectively serve the downtown area and what guidelines, criteria, and recommendations should inform and frame these decisions?

No existing private sector institution operating in the Toledo area has shown a capacity to provide the range, breadth, and depth of post-secondary training and education services at the post-secondary (and especially the sub-baccalaureate level). Only the public sector institutions can achieve those ends.

Four organizational options exist for the City of Toledo and Lucas County regarding the provision of lower division sub-baccalaureate education that community colleges commonly provide. Consistent with the wishes of the City, we offer those without ranking or recommendation. We do, however, identify some significant factors that should inform and assist the City when setting their goals, and when engaging in discussions with these institutions regarding their willingness to create a downtown Toledo post-secondary campus. The four options are to; (1) do nothing, (2) ask the University of Toledo to reopen their community college, (3) ask Owens Community College to initiate community college services in Downtown Toledo, (4) ask the University of Toledo and Owens to create a partnership that would provide for a comprehensive post-secondary campus for skills enhancement, and for certificate and degree

[33] One limitation of UT has been their use of the Seagate Center as the site of most of their downtown educational efforts; a site created in 1986 as joint use operating agreement with the Toledo Convention and Visitors Bureau as part of a downtown re-development effort. Since its inception, UT's downtown programming has had to accommodate its space availability at the Toledo Lucas County Convention and Visitor's Bureau to the vagaries of conference schedules, which has first priority on the space, thus limiting the types and duration of course offerings. Thus, one factor that may have contributed to the need for additional educational opportunities is the constraints on

attainment. Each of the four program options is described below.

Option 1: Do Nothing

The future of Toledo requires that its workforce possess the information age skills so that Toledo businesses can compete in a global marketplace of goods and services. The citizenry near to Downtown, who constitute the largest cluster of poor people in the City and County, need ready access to the general and technical education programs, and workforce training offered in a comprehensive community college. The workers in businesses and the public sector downtown also need access to a post-secondary institution to complete their Baccalaureate (and initiate graduate) degrees and to upgrade their skills in a timely manner and convenient site.

Failing to act would result in the continued outflow of economic benefits from the City and County to adjacent counties, depriving the City and County of the economic impacts and multiplier effects that could contribute to the economic revitalization of downtown, and resulting in lost revenues to the City and County tax coffers. Further, if the City of Toledo and Lucas County fail to act affirmatively to create an entity in Downtown Toledo, it may only accelerate the flight of well-educated workers to the ring suburbs, evident in Tables 10 and 11.

Option 2: Ask the University of Toledo to Reopen their Community College.

For thirty-seven years, UT operated ComTech as a separate academic college within UT. Other colleges included Law, Pharmacy, Engineering, Education, Arts and Sciences, Business, and University College (which has continued to deliver continuing education and other non-traditional degree programs and services through outreach to the community). UT closed ComTech but through its various other colleges continues to offer the same Associate's degrees UT offered at ComTech prior to its creation.

For UT to reopen its Community and Technical College would require that UT seriously examine its fee structure. Deductive evidence from this analysis, the professional literature, and common sense suggests that fee levels affect decisions to attend, retention, and degree completion rates for students—especially low-income students. Owens Community College's tuition for its degree programs is $75 per hour, compared to UT's $150.16. The functions and internal culture of a comprehensive community college are much different than that of a comprehensive

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UT due to its previous investment in downtown redevelopments.

university that has a wide array of academic programs, including many at the master's, professional, and doctoral levels. To create a new ComTech that would have the same fee structure as Owens Community College would require a different full-time faculty to student ratio than currently exists on the Bancroft campus, and a fee structure similar to that Owens presently has in place. This means UT would create an entity in Downtown Toledo that would directly compete with the general education offerings existing in its Arts and Sciences College. Such a move would not make sense relative to UT's own Bancroft (and other baccalaureate) campus.

Advantages of UT re-opening a sub-baccalaureate campus include:

- Existing downtown facilities, and therefore, UT could offer sub-baccalaureate courses without having to secure state capital improvement moneys.
- Co-locating education programs with community outreach and the counseling and remedial skills divisions of University College could facilitate and coordinate skills enhancement, workforce training services, and institutional and regional economic development activities.
- Assuring a continuity of curriculum and academic expectations with baccalaureate institutions. Further, it would allow a single entity to provide transcript programs. Associate and Baccalaureate training in a single location would enhance program availability for a wider range of students and potentially increase student retention beyond the Associate level.
- A greater percentage of Ph.D. faculty and of full-time faculty to teach their general education courses.

Potential disadvantages include:

- A failure of the research University administration and faculty to sufficiently support programs on this "branch campus." The belief that this occurred with ComTech is widely held in the community. UT might re-assure the community if this campus had a separate or dedicated budget and an administrative provost answering only to the President of the University.
- Failure to recruit effectively in low-income neighborhoods and/or a perception in the aftermath of the closure of ComTech, that UT is not interested in attracting students from such communities.

Option 3. Ask Owens to Initiate a Community College Campus Downtown.

The City and County could ask Owens Community College to initiate a Downtown Toledo Campus, in addition to its existing Perrysburg and Findlay campuses. The move would fill the void in downtown development and create greater access for continuing education

students as well as new students living in close proximity to the downtown campus. Advantages of Owens opening a downtown campus include:

- Their primary mission is to provide post-secondary and Associate level education.
- Their principal recruitment focus is on students whose previous attainment is similar to those in the downtown area
- A single entity would responsible for sub-baccalaureate education to work with both the secondary schools and 4-year institutions to promote transfer and seamless articulation.
- Low tuition.
- A wide array of vocational and technical curricula.

Potential disadvantages include:

- No existing downtown facilities and an entrenched capital improvement plan for their existing campuses.
- If they are unable to provide applied technology and laboratory courses in a downtown site and only offer some courses downtown and then require students to take others at the Oregon/Perrysburg campus, this would undermine the goal of reducing transit and time concerns and undercut the economic advantages to the City in terms of economic development and revitalization, and tax revenue generation.

Option 4: Ask the University of Toledo and Owens to Initiate a Partnership that Would Provide for a Comprehensive Post-Secondary Campus for Skills Enhancement, Including Certificate and Various Degree Attainment.

Each institution has its relative strengths and potentially brings specialized resources to a partnership. Unfortunately a review of past history shows a level of competition and acrimony between the institutions that is not healthy. It is this history that the current leaders are trying to overcome. The University of Toledo has created effective partnerships with other baccalaureate and graduate institutions in Northwest Ohio. Each institution has participated in community outreach and workforce training programs, including partnerships formulated by non-profit institutions such as the Private Industry Collaborative. It is possible that a working relationship between the two institutions might be established. While there may be several advantages to the City, its residents, and even some students of the respective institutions[34] to such a partnership,

[34] For example, baccalaureate students might want to gain or update their vocational skills while continuing to seek their baccalaureate degrees—learning a simple computer program or gain the ability to drive a truck while also pursuing a BA. On the other hand, the ability of working class students not otherwise exposed to professional scholarship might benefit by learning about research, securing mentorships with full-time faculty, securing more challenging courses early in their academic careers, and/or expanding their intellectual horizons while assuring their basic ability to repay loans and/or support a family if they were to interact with well-established full-time research

from the institutional perspective there is very little incentive for either institution to enter such a relationship and the significant history of acrimony makes such a relationship improbable.

If the City and other interested parties such as the Port Authority, Regional Growth Partnership, Chamber of Commerce, and others bring pressure to bear, UT and Owens might find a way to work in complementary manners within the downtown area, if not in formal partnership. The most effective strategy for promoting such a working relationship would be to identify the relative strengths of each. Owens brings a commitment to open-access education, low tuition, and a wide array of technical and vocational courses. UT brings a strong, well-credentialed, full-time faculty, and curricular standards in general education courses that effectively prepare students for post-Associate degree learning—a very important factor if we remember that the goal is life-long learning and continuous skill enhancement. Potential impediments include strong antagonism between the faculty toward the other institution, significant tuition differences, and an overlap of tutorial, remedial, and some vocational programs. There would also be significant issues of administrative purviews and responsibilities in such an arrangement. Any attempt to bring these institutions together should involve not only the administrators, but as we have seen with other local partnerships, the faculty of these institutions, so that they can work to establish common understandings and standards, and can work toward complementary outcomes. Broad-based involvement to produce common expectations and understandings, as the research literature shows, is the key to success in inter-institutional partnerships.

Upon initial reflection, the likelihood of success in creating such a partnership may seem limited. Yet significantly, the Study Team found that the executive leadership at *both* public higher education institutions is committed to finding answers on behalf of the citizens of Downtown Toledo and Lucas County. Interim UT President William Decatur noted:

> The University of Toledo is committed to partnering with Owens Community College and the private and public sector leadership to provide the fullest range possible of postsecondary education and services to the people of Toledo. Our roots are in Toledo. We are an urban university and proud to have that mission. For the first 100 years of our history, we were a municipal university directly supported by the City. We will always be committed to Toledo.
>
> The citizens of Toledo, particularly downtown Toledo, deserve the widest range and best quality of academic programs and services. To this end, we look forward to partnering with

university faculty in their general education courses.

> Owens Community College to dramatically improve transfer and articulation for students attending both institutions. We also look forward to providing the lifelong learning services and programs that older adult students need to be competitive in the Information Age.

Owens Community College President Dan Brown also indicated a strong desire to partner with business and civic leaders in Downtown Toledo, and to have his institution intimately involved in the training and retraining needs of businesses in the City of Toledo and Lucas County. President Brown is well aware of the need for Toledo to have the best retraining, life-long learning system it can possibly have. In interviews with the Study Team, he indicated a desire to move beyond the distrust and unrestrained competition between UT and Owens.

It is time to assure the goals of lifelong education, to improve human capital infrastructure, and to help revitalize Downtown Toledo by creating a major new continuing education facility. Other areas of Ohio and the nation are moving forward, Toledo must do so as well.

ABOUT THE RESEARCH TEAM

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